

Unofficial Review of John Widdoss Report on  
Appraising Fractionated Interests in the Great  
Plains Region dated May 5, 2006

## John Widdoss Solution to Appraising Fractionated Interests in Trust Land

**His Theory:** If there is no active market for fractionated interests off the reservations then the fractionated interests on the reservations have no value.

His theory is expressed in his recommendations:

<b>John Widdoss Recommendations</b>		
% Partial Interest	% Suggested Discount	% of 100% interest value
90.00%	10.00%	90.00%
80.00%	15.00%	85.00%
70.00%	20.00%	80.00%
60.00%	30.00%	70.00%
50.00%	40.00%	60.00%
40.00%	50.00%	50.00%
30.00%	70.00%	30.00%
20.00%	90.00%	10.00%
10.00%	100.00%	0.00%

**Comments:** Approximately 70% to 90% of land interests in the Great Plain Region are less than 2%. The interests that are less than 10% is even greater. Using the John Widdoss recommendations most land interests (at least 90% or more) would be appraised as zero value.

This theory is so absurd that I am astounded that it has to be exposed and discredited.

The first two columns are copied from the John Widdoss Report. I have added the third column to illustrate the severity of the theory as it will affect the value of fractionated interests.

The problem with Mr. Widdoss is that he is so enamored with his theory that he hasn't realized that it doesn't even remotely apply to the problem he purports to solve.

His theory is not the only problem. The data that he compiled is even a bigger problem.

States	Location of Sale Properties Transactions	
	No	Percent
California	4	4.88%
Colorado	8	9.76%
Idaho	1	1.22%
Illinois & Nebraska	1	1.22%
Indiana	2	2.44%
Kansas	10	12.20%
Missouri	1	1.22%
Montana	15	18.29%
North Dakota	1	1.22%
South Dakota	1	1.22%
Texas	38	46.34%
<b>Total</b>	<b>82</b>	<b>100.01%</b>

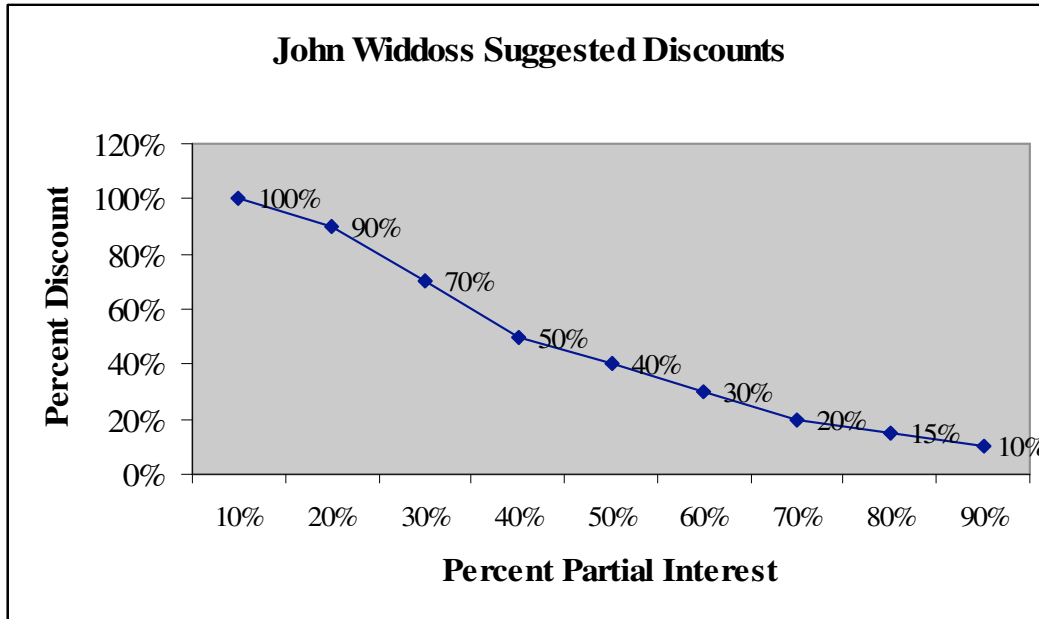
The faulty theory must be tested to determine its validity. This is done by researching sale transactions to observe how peoples treat fractionated interests when buying or selling them. Mr Widdoss makes the point that there are no fractionated interest sales in the Great Plains Region. Instead of accepting that fact and realizing that a market sale comparison approach does not solve the appraisal problem in Great Plains, he makes an incredible inductive leap and concludes that data from Texas, Montana, and other places is relevant in the Great Plains.

In addition to using data from foreign places, Mr Widdoss used data that does not meet his own criteria for “market evidence”. He sited 66 sales. However, there were 16 separate transactions that were combined as though they were single transactions. When those corrections were made there were 82 transactions.

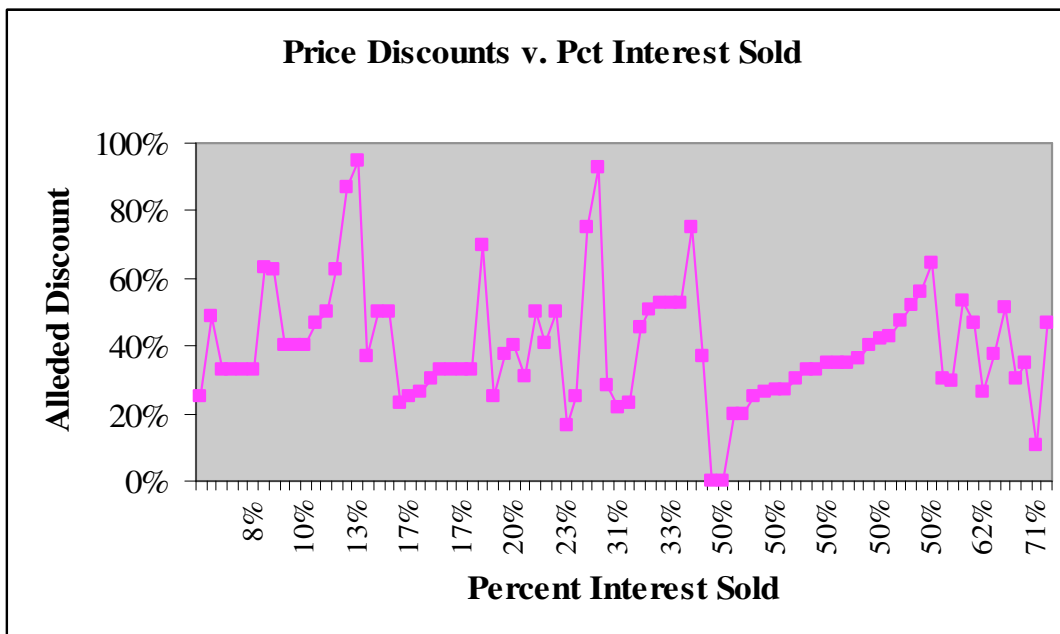
<b>Data Integrity Summary</b>		
<b>Data Issues</b>	<b>Cases</b>	
Was Sale Price Reported?	37	The total sale price for the fractionated interest was reported on only 37 of the 82 transactions. The price was stated as a price per acre for 42 of the transactions. This required a calculation, which was subject to error, to determine the total price paid.
Was Sale Price Calculated?	42	
Was there no Sale?	3	
<b>FMV Source for 100% Int Val</b>		There was no sale in 3 of the cases. Mr. Widdoss just made some inferences to arrive at a number.
Appraisal	11	
Area Sales	38	The exercise required a comparison of the value of a 100% interest with a price paid for a fractionated interest to determine the discount for fractionated interests. The 100% interest value was supported with an appraisal on only 11 of the 82 transaction. The other values were justified by reference to one or two sales in the area, the county assessor, hearsay, and other cursory sources.
Assessor	1	
Buyer	3	
County	4	
Guess	1	
Hearsay	15	
None	9	
<b>Arm's Length</b>	44	Only 44 out of the 82 transactions meet the definition of an “arms length” transaction. Eleven were purchased by individuals who owned an interest and 12 were purchased by family members.
<b>Not Arms Length</b>	38	
<b>Description of non-arms length sales</b>		
Pt Owner	11	
Lessee	12	
Family	3	
Forced sale of 100%	1	
Court Threat	1	
Bank Sale	1	
Included free lease	1	
Uncle	2	
Pt Owner & Family	1	
Threat of Litigation	1	
Other	4	
<b>Total non-arms length sales</b>	<b>38</b>	

family members.

The most serious error in the John Widdoss report is that he apparently did no analysis on the data that he collected. He only reported it and then made recommendations that were consistent with his bias. His recommendations imply that people make progressively bigger discounts to the sale price as the percent interest sold becomes smaller.



John Widdoss' data shows a different kind of relationship.



Visually it is impossible to observe any correlation between the percent interest sold and the percent discount made to the sale price.

A more precise estimate of the amount of correlation that exists between percent interest sold and percent price discount is found using regression analysis. Simple linear regression aims to find a linear relationship between a response variable and a possible predictor variable by the method of least squares. Regression analysis not only estimates the relationship between two variables but it estimates the degree of correlation.

The correlation coefficient (a number between 0 and 1 or 0% to 100%) shows the degree of correlation. If the correlation coefficient is 1 or 100% then there is perfect correlation. If the correlation coefficient is 0 or 0% then there is no correlation.

The R<sup>2</sup> (a number between 0 and 1 or 0% and 100%) expresses the percentage of the variance in one variable that is explained by the changes in the other variable. If the R<sup>2</sup> is 1 or 100% then 100% of the variances in one variable is due to changes in the other.

A regression analysis was made on the John Widdoss data. This is the same data that he presents as evidence to support his recommended discounts for fractional interest values. The regression analysis clearly shows that there is no significant correlation between percent interest purchased and the percent discount made to the sale price. The R<sup>2</sup> is only 5.49%. In order to be significant the R<sup>2</sup> would have to be at least 80%.

*Regression Statistics*

Multiple R	23.43%	Average Discount	40.05%
R Square	5.49%	StDev Discount	17.65%
Adjusted R Square	4.31%	Min Discount	0.00%
Standard Error	17.27%	Max Discount	94.45%
Observations	82	StErr/Avg Disc	97.83%

Another point of significance is that the Standard Error from the regression is only 0.38% less than the Standard Deviation. **The data simply does not agree with John Widdoss' recommendation.**

**Conclusion:**

The John Widdoss report is not the work of a serious and objective researcher. It is more like the act of a magician who uses his slight of hand to create the illusion that something that is not real is real. John Widdos has used his “verbal slight of hand” to create the illusion that the Government should discount the appraisals of fractionated interests in Indian Trust Land by 10% to 100%.

Mr Widdoss has applied the wrong theory to the problem. His data is the wrong data and even if it were, it disproves his theory and recommendations.

The most damaging part of his report is that it has been kept secret. It needs to be exposed to public review. If it becomes the basis of OST appraisal policy it will be a great injustice to the people who own fractionated interests in Trust Lands.

## **Rebuttal to John Widdoss's Conclusions about the M.A.D. Appraisal Program**

John Widdoss exposes his prejudice by labeling the M.A.D. Appraisal program "MAD Jr".

John Widdoss tries to discredit the M.A.D. Appraisal program by emphasizing that each report was not signed by a State Certified Real Estate Appraiser. If John Widdoss were to read Standard 6 (Mass Appraisal Development and Reporting) of the Uniform Standards of Professional Appraisal Practice (USPAP) he might understand the legitimacy of the M.A.D. Appraisal program.

Prior to Dave Baker's retirement, he would prepare a Mass Appraisal Report that met the requirements of USPAP Standard 6. Mr. Baker would research the lease and sale market for each of the reservations in the Great Plains Region. He would develop and test the capitalization rates used in the M.A.D. Appraisal program. This report was sent to the respective agency and was on file as the official mass appraisal. It was signed by a State Certified General Appraiser.

Dave Baker tested the M.A.D. Appraisal program output by generating appraisals for a representative sample of properties and then comparing the results with comparable sales and other appraisals. The normal variance was no more than 3%. Thus the program was certified a Certified General Real Estate Appraiser as "producing credible appraisal estimates."

Each report generated by the M.A.D. Appraisal system was reviewed by the agency Realty Officer who would certify that the factual data about the property was correct. The Agency Superintendent, who had the delegated authority, would approve the report as an official BIA document. The roles of the Realty Officer and Superintendent were not to act a appraiser or review appraiser. That role was performed by the Regional Appraiser.

The reports generated by the M.A.D. Appraisal program are a part of the Mass Appraisal prepared by the Regional Appraiser. They were classified as "Restricted" because they were only to be used by the Client (the BIA).

The M.A.D. Appraisal Program, when used as designed, produced credible appraisal reports at a fraction of the cost of traditional appraisals. The average cost was less than \$5.00 compared to \$400.00 for a traditional report.

John Widdoss implied that when the tract acres on the Ownership file did not match the summation of the tract acres in the land inventory file that the user made an arbitrary entry into the program to force them to equity. This was not the intention of the program design nor was it a general practice except by the Chickasaw Nation Industries (CNI) Staff who were using the program illegally. The original intent was for the Realty Office to verify and correct all pertinent data before running the program.

John Widdoss exposes his complete lack of understanding of mathematics of income capitalization with his pontifications about Yield Rate (Yo) and Capitalization Rate (Ro).

Simply stated, the M.A.D. Appraisal program calculates the present value of the potential income over a seven period. Seven years was selected because most leases are five years and a seven year period would reflect both contract and market rent for the property.

The theory used in the M.A.D. Appraisal program is that a fractionated interest only allows the owner that right to (1) receive income and (2) the right to dispose through sale, gift or exchange. Therefore, the present value of the potential income plus the present value of the property at the end of the holding period represents the current value of the property.

Present value is found by dividing each rental payment by a compound interest factor  $(1+R)^n$  where R=ratio of rent to value and n=payment number. It is used to calculate the principal portion of a series of future payments. This includes potential rental income payments and the potential sale price at the end of the holding period.

John Widdoss did observe correctly that the estimated value from the M.A.D. Appraisal program used a “leased fee” calculation. However, because his limited knowledge of the mathematics of capitalization, he makes the mistake of concluding that a leased fee calculation produces a distorted estimate of value. Apparently he does not know that the

<b>Three Calculations that Produce the Same Answer</b>					
Direct Calitalization		Lease Fee Calculation 7 year projection			
Income	\$500.00	Pmt#	Income	Rate	DCF
Rate	5.00%	1	\$500.00	5.00%	\$476.00
Value	\$10,000.00	2	\$500.00	5.00%	\$454.00
		3	\$500.00	5.00%	\$432.00
		4	\$500.00	5.00%	\$411.00
		5	\$500.00	5.00%	\$392.00
		6	\$500.00	5.00%	\$373.00
		7	\$500.00	5.00%	\$355.00
		7	\$10,000.00	5.00%	\$7,107.00
		Total			\$10,000.00
		Lease Fee Calculation 5 year projection			
		Pmt#	Income	Rate	DCF
		1	\$500.00	5.00%	\$476.00
		2	\$500.00	5.00%	\$454.00
		3	\$500.00	5.00%	\$432.00
		4	\$500.00	5.00%	\$411.00
		5	\$500.00	5.00%	\$392.00
		5	\$10,000.00	5.00%	\$7,835.00
		Total			\$10,000.00

lease fee calculation produces exactly the same result as direct capitalization when the rental income is equal to market rent.

Also, given the same data a 5 year projection produces the same result as a 7 year projection.

So, why use a “leased fee” model to appraise partial interests? Here are the reasons.

- 1) It provides the flexibility to refine the mass appraisal model to accommodate the realities of fractionated interests in Trust Land.
  - a. It reflects variable income payments over the term of the projection period.
  - b. It allows for the use different cap rates to reflect different risks for contract and projected market rental income.
  - c. It will appraise interests with multiple leases and/or multiple land uses, such as range and farm pasture.
- 2) Fractionated interests in Trust Land in the Great Plains Region can only generate income from a lease or grazing permit. Owner use is not an option without a lease.
- 3) Ownership of a fractionated interest in Trust Land has many of the same characteristics as ownership of a bond. It has a value based on its potential earnings.

A leased fee calculation is the best solution to estimating the value of fractionated interests in Trust Land.

#### **Other John Widdoss Conclusions:**

- B. M.A.D. will allow valuation of a 100% interest in the allotment, but does not allow a valuation of the full report to print.
  - a. **Rebuttal:** *The MAD Appraisal Program was developed to process appraisals of fractionated interests, no 100% interests.*
- C. M.A.D. defaults to individual’s interest in the allotment, but does not allow for appraisal of smaller interest—if needed.
  - a. **Rebuttal:** *The MAD Appraisal Program was developed to process appraisals of the fractionated interests held by one individual in a specific tract of land.*
- D. The System values larger parcels in the same manner as tracts containing less than 10 acres---which likely have residential or commercial characteristics.
  - a. **Rebuttal:** *The MAD Appraisal Program was developed to process appraisals of fractionated interests in agricultural tracts (cropland, pasture, and rangeland). Appraisals for homesites and other land uses were prepared using contract appraisers. The majority of tracts requiring appraisals in Great Plains are agricultural tracts.*
- E. No GIS support for productivity ratings; which promulgates inconsistency on all Reservations.
  - a. **Rebuttal:** *Several proposals were made to the Great Plains regional Office to incorporate GIS with MAD. However, Cora Jones, the Regional Director, refused to allow it. Therefore, other measures of productivity were used for farm appraisals. The productivity of the range tracts (Ac/AUM or stocking rate) was determined by the Agency Range Staff.*

- F. No integration with Land Operations which is obligated to have a 'land inventory' of each allotment to account for 'missing' acreages. Land Operations should have current land inventories---a key for solving future valuation problems, either through GIS productivity ratings and/or by 'land-mix' procedures typically employed in the private sector.
- a. **Rebuttal:** *Land Operations does not keep a land inventory on each allotment used for farm and pasture. They do keep records in the rangeland stocking rates. The M.A.D. Appraisal program used the data from the Range System to produce the appraisal of interests in land that were used a rangeland.*
- G. There is no means of delineating between various types of leases on each appraisal, i.e., hunting (recreational), homesites, or specialty types within M.A.D.
- a. **Rebuttal:** *The M.A.D. Appraisal program was developed to appraise partial interests in tracts of land that were used for farm, pasture, and range. The program identified all leases that encumbered the property whether they be farm/pasture or range or both. Properties with other land uses were appraised by contract appraisers.*

### **Conclusion:**

Mr. Widdoss has prepared a review of the M.A.D. Appraisal program while having little or no understanding of the program, an obvious bias against it, and being completely unaware of Standard 6 of the Uniform Standards of Professional Appraisal Practice (USPAP). It would be unconscionable for the BIA or OST to give such a biased and flawed report any credence.